

**The Economic Effects on Michigan of
Assay Designs, Inc. Laboratory and Production Facility**

Prepared by the Michigan Economic Development Corporation utilizing Regional
Economic Models, Incorporated (REMI) software.

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Abstract

Assay Designs, Inc. is considering locating a new laboratory and production facility in Pittsfield Township, Michigan. This facility would be used to manufacture and market specialized research immunoassay and detection kits, and recombinant proteins, antibodies and luminescent reagents used by pharmaceutical companies to develop new drugs, and by researchers in universities and other organizations to investigate basic mechanisms of disease. The new facility would employ up to 86 people by the end of 2010. We estimate that by 2013 this location will have generated a total of 238 jobs in the state. Total state government revenues through 2013, net of MEGA costs and adjusted for inflation, would increase by \$4.8 million (2005 dollars) due to the Assay Designs, Inc. laboratory and production facility.

The purpose of this study is to estimate the potential economic and fiscal benefits to Michigan of Assay Designs, Inc. locating a new laboratory and production facility in Pittsfield Township. Investment activity would take place between 2005 and 2010 with an investment of \$10 million. The facility would employ an additional 86 people and would be at full production by 2010.

The estimates of the benefits attributable to the project include the total number of jobs created in Michigan (by major industry, including spin-off jobs), and the associated personal income and state government revenue. Benefits net of the MEGA incentive package, from 2005 to 2013, are shown in the attached table. The MEGA incentive package includes a tax credit to the company equal to 50 percent of the state income tax rate on the payroll (gross wages) of employees hired at the facility for the period 2006 to 2009 and 100 percent of the state income tax rate on the payroll (gross wages) of employees hired at the facility for the period 2010 to 2013.

The total employment effects, reported in the first line of the table, include the direct jobs created at the facility itself plus spin-off jobs. The spin-off jobs are created from two sources, increased purchases from Michigan suppliers and spending by people who receive income due to the increased economic activity. In 2010, the first year of full operations, an additional 86 jobs are generated in the state. The total number of jobs (direct plus spin-off) for every direct job introduced constitutes the "employment multiplier." The employment multiplier for the expansion averages 1.97 over the period 2005 to 2013. Sectoral detail on the employment is also shown in the table.

Personal income is shown in the next section of the table. Personal income is defined as the income of Michigan residents from all sources, after deduction of contributions to social insurance programs but before deduction of income tax and other personal taxes. As shown in the table, if Assay Designs, Inc. were to locate in Michigan under the incentive program, state personal income in 2010 would be higher by \$11.7 million (in current dollars) than it would be without the facility, and in 2013, it would be \$16.5

million higher. Adjusted for inflation, these numbers in 2005 dollars would be \$10.5 million in 2010 and \$13.9 million in 2013.

The gain in economic activity results in higher government revenues. We estimate that in 2011, the first year of full operations without investment activity, the facility would generate \$989,000 in additional gross state revenue, and that the MEGA package would provide a \$174,000 incentive to Assay Designs, Inc. Thus, the new Assay Designs, Inc. facility would increase state revenues in 2011 by \$815,000, net of MEGA costs.

Over the period 2005 to 2013 state government revenue is projected to increase by \$6.2 million (in current dollars) due to the new Assay Designs, Inc. facility. The MEGA incentive package for Assay Designs, Inc. is forecast to cost \$900,000 over the period, resulting in a net increase in state government revenue of \$5.3 million. Adjusted for inflation, the total net increase in state government revenue from 2005 to 2013 would be \$4.8 million in 2005 dollars. These calculations do not include any revenue losses due to the property tax abatement or the investment tax credit. If the costs of the abatement and the tax credit were included, the net revenue gain to state government would be slightly less.

None of the estimates include the nonmeasurable effects that would produce additional economic and fiscal benefits for Michigan, such as the intangible advantages of influencing other location and expansion decisions.

Assay Designs, Inc.
Economic and Fiscal Effects on Michigan - Net Benefits with the Incentive Package

Economic/Fiscal Indicator	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total
Total Employment	106	46	88	131	178	220	224	225	238	
Manufacturing	4	16	34	51	69	85	85	84	85	
Non-Manufacturing	102	30	54	80	109	135	139	141	153	
Retail Trade	12	5	8	11	15	18	18	18	21	
Services	23	15	29	43	58	73	73	74	80	
Other	67	10	17	26	36	44	48	49	52	
In Current Dollars (Thousands):										
Personal Income	\$4,150	\$2,197	\$4,181	\$6,378	\$8,972	\$11,690	\$12,850	\$13,820	\$16,450	\$80,688
Gross State Revenue	320	169	322	491	691	900	989	1,064	1,267	6,213
Mega Cost	0	13	30	47	65	167	174	182	190	868
State Revenue Net of MEGA Cost*	\$320	\$156	\$292	\$444	\$626	\$733	\$815	\$882	\$1,077	\$5,345
Adjusted for Inflation (Thousands of 2005 Dollars):										
Personal Income	\$4,150	\$2,146	\$3,998	\$5,974	\$8,233	\$10,512	\$11,325	\$11,940	\$13,933	\$72,211
Gross State Revenue	320	165	308	460	634	809	872	919	1,073	5,560
Mega Cost	0	12	28	44	60	150	153	157	161	765
State Revenue Net of MEGA Cost*	\$320	\$153	\$280	\$416	\$574	\$659	\$719	\$762	\$912	\$4,795

* These estimates do not include any state government revenue losses due to the Investment Tax Credit, the Renaissance Zone Credit or the property tax abatement.